

# NASA TECH BRIEF



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## Materials Data Handbook, Inconel Alloy 718

A comprehensive compilation of technical data on Inconel 718 (a commercial nickel-chromium base alloy) has been presented in a handbook prepared by the Department of Chemical Engineering and Metallurgy, Syracuse University Research Institute, under contract to Marshall Space Flight Center.

This "Materials Data Handbook, Inconel Alloy 718" includes data on the properties of the alloy at cryogenic, ambient, and elevated temperatures, and other pertinent engineering information required for the design and fabrication of components and equipment utilizing this alloy. The handbook information is arranged in twelve chapters under the following headings:

1. General Information
2. Procurement Information
3. Metallurgy
4. Production Practices
5. Manufacturing Practices

6. Space Environment Effects
7. Static Mechanical Properties
8. Dynamic and Time Dependent Properties
9. Physical Properties
10. Corrosion Resistance and Protection
11. Surface Treatments
12. Joining Techniques

### Note:

A copy of the "Materials Data Handbook, Inconel 718", edited by John Sessler and Volker Weiss, may be obtained from:

Technology Utilization Officer  
Marshall Space Flight Center  
Huntsville, Alabama 35812

References: B67-10282

Source: John Sessler and Volker Weiss  
of Syracuse University Research Institute  
under contract to  
Marshall Space Flight Center  
(MFS-2348)

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